## Message

From: Leifer, Kerry [Leifer.Kerry@epa.gov]

**Sent**: 11/24/2020 8:20:13 PM

To: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]; Rosenblatt,

Daniel [Rosenblatt.Dan@epa.gov]

**Subject**: Fwd: Statement sent to Globe

FYI

Kerry Leifer, Chief
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Begin forwarded message:

From: "Deegan, Dave" <Deegan.Dave@epa.gov> Date: November 24, 2020 at 3:05:49 PM EST

To: "Deziel, Dennis" <Deziel.Dennis@epa.gov>, "Szaro, Deb" <Szaro.Deb@epa.gov>, "McGuire, Karen" <Mcguire.Karen@epa.gov>, "Barmakian, Nancy" <Barmakian.Nancy@epa.gov>, "Chow, James" <chow.james@epa.gov>, "Gutro, Doug" <Gutro.Doug@epa.gov>, "Dixon, Sean" <dixon.sean@epa.gov>, "Norcross, Jeffrey" <Norcross.Jeffrey@epa.gov>, "Senn, John" <Senn.John@epa.gov>, "Rumph, Mikayla" <Rumph.Mikayla@epa.gov>, "Carr, Stephanie" <Carr.Stephanie@epa.gov>, "Hewitt, James" <hewitt.james@epa.gov>, "Drinkard, Andrea" <Drinkard.Andrea@epa.gov>, "Hoverman, Taylor" <hoverman.taylor@epa.gov>, "Grantham, Nancy" <Grantham.Nancy@epa.gov>, "Messina, Edward" <Messina.Edward@epa.gov>, "Dinkins, Darlene" <Dinkins.Darlene@epa.gov>, "Nesci, Kimberly" <Nesci.Kimberly@epa.gov>, "Dennis, Allison" <Dennis.Allison@epa.gov>, "Siedschlag, Gregory" <Siedschlag.Gregory@epa.gov>, "Leifer, Kerry" <Leifer.Kerry@epa.gov>, "Saenz, Diana" <Saenz.Diana@epa.gov>

Cc: "Deegan, Dave" < Deegan. Dave@epa.gov>

Subject: Statement sent to Globe

Many thanks again for everyone's quick assistance to hone this statement! Best wishes to you all for a happy, relaxing and SAFE Thanksgiving!

Thanks! Dave

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Dave Deegan U.S. EPA, New England Regional Office Office of Public Affairs phone: 617.918.1017 | mobile: 617.594.7068



From: Deegan, Dave <Deegan.Dave@epa.gov> Sent: Tuesday, November 24, 2020 3:01 PM

To: Abel, David <dabel@globe.com>

Cc: Deegan, Dave < Deegan. Dave@epa.gov>

Subject: RE: Globe PFAS story

Hi David, Here's a statement. Please attribute to US EPA. Thanks for your patience!

>>>

EPA is aware of the concerns raised about traces of per- and polyfluoroalkyl substances (PFAS) in a mosquito control product named Anvil 10+10 ULV from Clarke Mosquito used in Massachusetts for public health protections. The agency is providing technical support to the Massachusetts Department of Environmental Protection (MassDEP) as they assess the situation and perform sampling of the pesticide product in question.

EPA has confirmed that the Anvil 10+10 product does not include PFAS in its registered formulation and has confirmed with Clark Mosquito that PFAS is not an ingredient or additive in their product. EPA has also obtained additional product samples for testing and laboratory analysis and is providing laboratory support, including development of an analytical method to detect PFAS in products such as Anvil 10+10. There are significant unanswered questions about the data currently available at this time. EPA will continue to work closely with and support the state on this issue. Aggressively addressing PFAS continues to be an important, active and ongoing priority for EPA under the agency's PFAS Action Plan.

## Background

On Aug. 10, 2020, an aerial mosquito prevention application was made in Plymouth County and parts of Bristol County in Massachusetts using Anvil 10+10 ULV (EPA Reg. No. 1021-1688-8329), which contains the active ingredients sumithrin and piperonyl butoxide. This pesticide is applied for mosquito control to protect public health by reducing Eastern Equine Encephalitis (EEE), a rare but deadly disease carried by mosquitos. In early 2020, environmental NGOs contacted the Massachusetts Reclamation Board, the Massachusetts Department of Agricultural Resources' Division of Pest Services, and other state agencies claiming that there were unspecified PFAS in the pesticide used for mosquito control.

EPA routinely provides federal technical assistance on PFAS across the country, including the Commonwealth of Massachusetts on this effort, to bring much needed support to state, tribal, and local governments. These partnerships allow for collaboration and encourage cutting edge research and information sharing — ensuring that our joint efforts are effective and protective of public health.

Additional information on EPA's PFAS efforts: <a href="www.epa.gov/pfas">www.epa.gov/pfas</a>.

Thanks!
Dave

Dave Deegan
U.S. EPA, New England Regional Office



From: Abel, David <<u>dabel@globe.com</u>>
Sent: Sunday, November 22, 2020 6:12 PM

To: Leifer, Kerry < Leifer.Kerry@epa.gov>; Deegan, Dave < Deegan.Dave@epa.gov>

Subject: Globe PFAS story

Hi Kerry and Dave,

I hope all's well. I'm working on a potential story about elevated levels of PFAS found in Anvil, the insecticide Massachusetts and other states use to spray for EEE. Below is a table of findings from DEP, as well as a press release and other documents from PEER, urging the state to ban the use of the chemicals.

Just wondering if you could respond to these questions:

- -- Are these findings of PFAS in Anvil from the DEP concerning, and if so, why or why not?
- -- Should we be as concerned about forever chemicals (which don't degrade) being sprayed by air and truck entering drinking water and other water systems, and if so, why?
- -- Based on these findings, should the EPA or states ban the use of these chemicals, and if so, why or why not?

Thanks!

Best, David

## **Summary Table of PFAS Concentrations from MassDEP Anvil 10 + 10 Sampling:**

| Sample collection date                       | 9/22                                                                   | 9/22                    | 9/22                                                                                | 9/22                               | 9/22                                                       | 10/21                   | 10/21                   | 10/21                                                | 10/21                                                                   | 10/22                                                |  |
|----------------------------------------------|------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------|-------------------------|-------------------------|------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------|--|
| Sample type                                  | 55 gal. drum 1                                                         | 55<br>gal.<br>drum<br>2 | CONTROL:<br>sampling<br>device<br>rinse<br>cntrl. for<br>55 gal.<br>drum 1<br>and 2 | 2.5 gal.<br>jug 1<br>(SAMPLE<br>3) | sampling<br>device<br>rinse<br>cntrl.<br>2.5 gal.<br>jug 1 | 55<br>gal.<br>drum<br>1 | 55<br>gal.<br>drum<br>2 | 55 gal.<br>drum<br>3 and<br>dupli-<br>cate<br>sample | Sampling<br>device<br>rinse<br>cntrl. for<br>55 gal.<br>drum 1<br>and 2 | 2.5 gal.<br>jug 2<br>and<br>Dupli-<br>cate<br>sample |  |
| PFAS Compound                                | Concentration in nanograms per liter (ng/L) or part per trillion (ppt) |                         |                                                                                     |                                    |                                                            |                         |                         |                                                      |                                                                         |                                                      |  |
| Perfluorobutanoic Acid<br>(PFBA)             | 692                                                                    | 171                     | ND<br>ND                                                                            | 52.8 J                             | ND                                                         | 716                     | 174                     | <b>230</b><br>216                                    | ND<br>ND                                                                | 59.2 J<br>62.9 J                                     |  |
| Perfluoro-3-Methoxypropanoic<br>Acid (PFMPA) | ND                                                                     | ND                      | ND<br>ND                                                                            | ND                                 | ND                                                         | ND                      | ND                      | ND<br>ND                                             | ND<br>ND                                                                | ND<br>ND                                             |  |
| Perfluoropentanoic Acid<br>(PFPeA)           | 296                                                                    | 76.6<br>J               | 0.370 J<br>ND                                                                       | 35.2 J                             | ND                                                         | 290                     | 55.4 J                  | 88.7 J<br>84.7 J                                     | ND<br>ND                                                                | 41.5 J<br>41.2 J                                     |  |
| Perfluorobutanesulfonic Acid<br>(PFBS)       | ND                                                                     | ND                      | ND<br>ND                                                                            | ND                                 | ND                                                         | ND                      | ND                      | ND<br>ND                                             | ND<br>ND                                                                | ND<br>ND                                             |  |
| Perfluoro-4-Methoxybutanoic<br>Acid (PFMBA)  | ND                                                                     | ND                      | ND<br>ND                                                                            | ND                                 | ND                                                         | ND                      | ND                      | ND<br>ND                                             | ND<br>ND                                                                | ND<br>ND                                             |  |

| Perfluoro(2-<br>Ethoxyethane)Sulfonic Acid<br>(PFEESA)                                       | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
|----------------------------------------------------------------------------------------------|--------|-----------|---------------|--------|---------|--------|--------|------------------|------------|----------------|
| Nonafluoro-3,6-Dioxaheptanoic<br>Acid (NFDHA)                                                | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| 1H,1H,2H,2H-<br>Perfluorohexanesulfonic Acid<br>(4:2FTS)                                     | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluorohexanoic Acid<br>(PFHxA)                                                            | 132    | 41.2<br>J | 0.407 J<br>ND | 17.6 J | 0.461 J | 105    | 23.7 J | 37.4 J<br>42.3 J | ND<br>ND   | 19.7 J<br>ND   |
| Perfluoropentanesulfonic Acid<br>(PFPeS)                                                     | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| 2,3,3,3-Tetrafluoro-2-<br>[1,1,2,2,3,3,3-<br>Heptafluoropropoxy]-Propanoic<br>Acid (HFPO-DA) | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluoroheptanoic Acid<br>(PFHpA)                                                           | 53.4 J | 23.6<br>J | ND<br>ND      | ND     | ND      | 47.6 J | ND     | ND<br>19.2 J     | ND<br>ND   | ND<br>ND       |
| Perfluorohexanesulfonic Acid (PFHxS)                                                         | ND     | ND        | ND<br>ND      | 52.8 J | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | 59.2 J<br>57 J |
| 4,8-Dioxa-3h-<br>Perfluorononanoic Acid<br>(ADONA)                                           | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| 1H,1H,2H,2H-<br>Perfluorooctanesulfonic Acid<br>(6:2FTS)                                     | ND     | ND        | ND<br>ND      | ND     | ND      | 29.8 J | 31.6 J | 27.6 J<br>28.9 J | ND<br>ND   | ND<br>ND       |
| Perfluorooctanoic Acid<br>(PFOA)                                                             | 25.7 J | ND        | ND<br>ND      | ND     | ND      | 21.8 J | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluoroheptanesulfonic Acid (PFHpS)                                                        | 107    | 100       | ND<br>ND      | 125    | ND      | ND     | 98.9   | 63.0 J<br>52.0 J | ND<br>ND   | 138<br>108     |
| Perfluorononanoic Acid (PFNA)                                                                | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluorooctanesulfonic Acid (PFOS)                                                          | 73.1 J | ND        | ND<br>ND      | 76.2 J | 2.73    | ND     | ND     | ND<br>ND         | 3.31<br>ND | 132<br>141     |
| 9-Chlorohexadecafluoro-3-<br>Oxanone-1-Sulfonic Acid (9Cl-<br>PF3ONS)                        | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| 1H,1H,2H,2H-<br>Perfluorodecanesulfonic Acid<br>(8:2FTS)                                     | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluorodecanoic Acid (PFDA)                                                                | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluoroundecanoic Acid<br>(PFUnA)                                                          | 13.8 J | ND        | ND<br>ND      | 21.5 J | ND      | 184    | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| 11-Chloroeicosafluoro-3-<br>Oxaundecane-1-Sulfonic Acid<br>(11Cl-PF3OUdS)                    | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |
| Perfluorododecanoic Acid<br>(PFDoA)                                                          | ND     | ND        | ND<br>ND      | ND     | ND      | ND     | ND     | ND<br>ND         | ND<br>ND   | ND<br>ND       |

Table notes: ND = not detected; J = estimated value; Tube rinse cntrl. = sampling device rinsates performed at sampling site prior to sample collection to assess any sampling device contamination. All field and trip blanks were generally non-detect and are not presented. In one, PFOS was detected at 3.3 ppt.

All samples were analyzed by Alpha Analytical, Mansfield, MA. using a modified version of EPA Method 533. Stated reporting limits for product samples were below 100 ng/L with detection limits ranging from approximately 5-50 ng/L depending on the analyte. QA/QC issues were appropriately noted by Alpha Analytical in the lab reports but all QA/QC elements have not been fully reviewed by MassDEP at this time.

The September and October samples were collected by two different contractors using new sampling devices. The October 2.5 gallon jug samples were directly poured into the sample collection tubes.

Initial samples that were collected on 9/2 are not presented. These were invalidated because appropriate field controls were not collected by the contractor and results were consistent with samples being contaminated during collection. In that round, five to thirteen PFAS were detected in duplicate analyses of the single drum 1 sample collected, with a maximum concentration of 25 ug/L (25,000 ppt) for PFBA.

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